

**Commonwealth of Kentucky
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382**

AIR QUALITY PERMIT

Permittee Name: Kingsford Manufacturing Company
Mailing Address: P.O. Box 9, Summer Shade, Kentucky 42166

Source Name: Kingsford Manufacturing Company

Mailing Address: Same as above

Source Location: 5126 Summer Shade Road
Summer Shade, Kentucky 42166

Permit Type: Federally-Enforceable Construction/Operating Permit
Review Type: PSD/Synthetic Minor

Permit Number: F-01-005 (Revision 3)
Log Number: 55473
**Application
Complete Date:** February 26, 2003

AFS Plant ID #: 21-169-00012
SIC Code: 2861

Region: Bowling Green
County: Metcalfe

Issuance Date: July 2, 2001
Revision I: April 18, 2002
Revision II: February 4, 2003
Revision III: March 05, 2003
Expiration Date: July 2, 2006

**John S. Lyons, Director
Division for Air Quality**

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**Pages reflecting changes due to minor permit revision III.*

| Rev # | Permit type | Log # | Complete Date | Issuance Date | Summary of Action |
|--------------|--------------------|--------------|----------------------|----------------------|--|
| ---- | F-01-005 | 51541 | 08/24/00 | 07/02/01 | ----- |
| 1 | Minor Revision I | 54549 | 04/15/02 | 04/18/02 | Construction/operation of charcoal briquet silos, and combining of dryers and coolers into single stack |
| 2 | Minor Revision II | 54792 | 4/24/200302 | 4/24/2003 | Construction/operation of a fabric filter dust collector, relocating the existing packaging line, and installing an additional packaging line |
| 3 | Minor Revision III | 55473 | 02/26/03 | 03/05/03 | Installation of third charcoal briquette dryer and cooler, conversion of two existing coal silos to carbonaceous materials silos, addition of a new covered conveyor system. |

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application which was determined to be complete on February 26, 2003, the Kentucky Division for Air Quality hereby authorizes the construction and operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in the Regulation 401 KAR 50:035, Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Unit 01

Wood Dryer and Furnace Operations

Description:

Machine Point 01 - Furnace – Multi-hearth furnace rated at 7.0 tons per hour of char production

Machine Point 02 - Wood Dryer – Rotary wood dryer to provide dry wood feed to the furnace

Control Devices:

| | |
|---|--|
| After Combustion Chamber (ACC) | -Direct afterburner to oxidize exhaust gases from furnace and dryer |
| Rated Burner Capacity – 2 @ 50 MMBTU/hr | -Natural Gas-fired |
| Furnace Cyclones, Dryer Cyclones | -High-efficiency cyclone collectors to recover particulate matter from furnace and dryer exhaust gases |

Commenced Construction Date for Control Equipment – proposed 2001

APPLICABLE REGULATIONS:

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality

Regulation 401 KAR 59:010, New process operations

1) Operating Limitations:

- a) Total char production shall not exceed 7.0 tons per hour on a daily average basis and 50,000 tons during any consecutive 12-month period. This is a self-imposed operating limit to preclude 401 KAR 51:017 for sulfur dioxide emissions.
- b) The ACC shall control emissions of CO, VOC, PM and PM₁₀ and shall be in operation and be operated at greater than 1,400°F (3-hour average) at all times the wood dryer and furnace operations are in normal operation. The wood dryer and furnace operations are considered in normal operation any time char is being produced.

Compliance Demonstration Method:

The permittee shall monitor the following:

- a) Char production on a daily basis.
- b) The ACC operating temperature.
- c) The occurrence and duration of non-normal wood dryer and furnace operations such as startups or shutdowns and any system malfunctions.
- d) Total hours of char production per month.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE

REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- e) Hourly char production throughput = [Total char produced during month]/[total hours of char production during month]

2. Emission Limitations:

- a) Pursuant to Regulations 401 KAR 51:017, nitrogen oxide emissions shall not exceed 91.0 pounds per hour from the ACC stack.
- b) Pursuant to Regulations 401 KAR 51:017, PM/PM₁₀ emissions shall not exceed 59.5 pounds per hour from the ACC stack.
- c) Pursuant to Regulations 401 KAR 50:035 and to preclude 401 KAR 51:017, sulfur dioxide emissions are limited to 1.5 lbs/ton of char produced.
- d) Pursuant to Regulation 401 KAR 59:010, Section 3(1), emissions from the unit shall not exceed twenty (20) percent opacity based on a six-minute average.

Compliance Demonstration Method:

- a) For NO_x Emissions:
 - i) According to 40 CFR 60 Appendix A, Method 3A, excess oxygen (O₂ percent) shall be monitored at the ACC stack.
 - ii) Actual emission rate = [Monthly char production] x [Emission factor observed during most recent stack test (pounds NO_x per ton of char)] / [Monthly hours of operation] Compliance with the mass emission limits will be assumed prior to conducting the initial stack test.
- b) For PM/PM₁₀ Emissions:
 - i) ACC operating temperature shall be monitored and maintained above 1400°F (3-hour average).
 - ii) Actual emission rate = [Monthly char production] x [Emission factor observed during most recent stack test (pounds PM/PM₁₀ per ton of char)] / [Monthly hours of operation] Compliance with the mass emission limits will be assumed prior to conducting the initial stack test.
- c) For Opacity:

The permittee shall perform daily observations of the ACC stack. Visible emissions shall be monitored as required by 5(c) below.
- d) For SO₂ emissions:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

After the initial stack test, see Section G (d)(5), the permittee will demonstrate continuing compliance with sulfur dioxide emissions by performing quarterly stack tests.

3) Testing Requirements:

- a) Except as noted below, Pursuant to 401 KAR 59:005 and 401 KAR 50:045, performance testing using the reference methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.
- b) Initial performance testing shall be conducted at the ACC stack for NO_x, PM, PM₁₀, CO, VOC, and SO₂ emissions. The CO, VOC, and SO₂ emission testing is required to confirm that their emission rates are such that PSD permitting requirements are not triggered for these pollutants. The permittee shall conduct a modified testing method using an out-of-stack Anderson impactor to determine the PM₁₀ emission rate from the ACC stack because performing an EPA Method 201 test at the elevated temperatures in the ACC is impractical.
- c) To preclude 401 KAR 51:017, quarterly stack testing of sulfur dioxide emissions will be performed to demonstrate continuous compliance with the sulfur dioxide emission factor of 1.5 lbs/ton of char produced. If the permittee demonstrates that SO₂ emissions are less than 1.5 lbs/ton char for four (4) consecutive quarterly stack tests, then the frequency of required stack testing will be reduced to an annual basis.
- d) See General Condition D.

4) Specific Monitoring Requirements:

- a) The permittee shall monitor monthly hours of operation of the wood dryer and furnace operations.
- b) The permittee shall monitor monthly char production of the wood dryer and furnace operations.
- c) The permittee shall maintain, calibrate, and operate according to manufacturer's specifications and/or standard operating procedures, a monitoring device for the measurement of temperature at the ACC.
- d) The permittee shall maintain, calibrate, and operate according to manufacturer's specifications and/or standard operating procedures, a monitoring device for the measurement of O₂ concentration at the ACC.

5) Specific Recordkeeping Requirements:

- a) The permittee shall keep records of the following:
 - i) Monthly hours of operation of the wood dryer and furnace operations.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii) Monthly char production (tons/hr).

- iii) Records of the ACC operating temperatures that are less than 1,400°F (3-hour average) during normal operations.
 - iv) Records of the ACC daily visible emissions observations.
 - v) Records of the ACC exhaust O₂ concentrations that are less than 1.0% (6-minute average).
 - vi) Records of all maintenance activities performed on the cyclones or the ACC.
 - vii) Records of quarterly stack testing for sulfur dioxide. See Condition 3 (c).
- b) During all periods of non-normal wood dryer and furnace operations, a log of the following information shall be kept:
- i) Date and times of periods of startup, planned and unplanned shutdown, or system malfunction.
 - ii) Confirmation that standard operating procedures were followed during planned shutdowns and ensuing startups (and other non-normal operations) to minimize air emissions.
- c) Daily logs of ACC visible emissions observations shall be kept. The logs shall include the following information:
- i) Whether any air emissions were visible from the ACC stack.
 - ii) Whether the visible emissions were normal for the ACC stack. If no abnormal emissions are observed, no further observations or records are required. If abnormal visible emissions are observed, the permittee shall perform a Method 9 reading for determining the opacity of the stack emissions. The opacity shall be recorded in the log.

6) Specific Reporting Requirements:

See General Condition F.

7) Specific Control Equipment Operating Conditions:

- a) The ACC shall operate at a minimum temperature of 1,400°F (3-hour average).
- b) The ACC O₂ concentration shall be greater than or equal to 1.0% (6-minute average).

8) Alternate Operating Scenarios:

N/A

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 02

Briquet Drying Operations

Description:

| | |
|------------------|------------------|
| Machine Point 01 | Briquet Dryer #1 |
| Machine Point 02 | Briquet Dryer #2 |

Machine Point 03 Briquet Dryer #3

| | |
|------------------------------|-----------------------------------|
| Rated Burner Capacity: | 1 @ 20 MMBTU/hr Natural Gas-Fired |
| Control Equipment: | None |
| Operating Rate: | 19.5 tons briquets (dry)/hr total |
| Construction Commenced Date: | Briquet Dryer #1 – 1995 |
| | Briquet Dryer #2 – 2002 |
| | Briquet Dryer #3 – proposed 2003 |

APPLICABLE REGULATIONS:

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality

Regulation 401 KAR 59:010, New process operations

1) Operating Limitations:

Total dry briquet throughput for briquet dryer #1, #2 and #3 shall not exceed 19.5 dry tons per hour.

Compliance Demonstration Method:

The permittee shall monitor the following:

- a) Briquets processed in the briquet dryers per month.
- b) Total hours of briquet dryer operation per month.
- c) Hourly briquet production throughput = [Total monthly briquets processed] / [Total monthly hours of briquet dryer operation]

2) Emission Limitations:

- a) Pursuant to Regulations 401 KAR 51:017, nitrogen oxide emissions shall not exceed 13.65 pounds per hour total for Briquet dryer #1 and #2 or 6.83 pounds per hour from each briquet dryer.

Nitrogen oxide emissions from Briquet dryer #3 shall not exceed 4.55 pounds per hour.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b) Pursuant to Regulations 401 KAR 51:017, PM/PM₁₀ emissions shall not exceed 14.1 pounds per hour total for Briquet dryer #1 and #2 or 7.05 pounds per hour from each briquet dryer.

PM/PM₁₀ emissions from Briquet dryer #3 shall not exceed 3.58 pounds per hour.

- c) Pursuant to Regulation 401 KAR 59:010, Section 3(1), emissions from the unit shall not

exceed twenty (20) percent opacity based on a six-minute average.

Compliance Demonstration Method:

- a) For NO_x Emissions:
 - i) ACC oxygen (O₂ percent) shall be monitored at the ACC stack. See condition 01(7)(b).
 - ii) Actual emission rate = [Monthly briquet production] x [Emission factor observed during most recent stack test (pounds NO_x per ton of briquets)] / [Monthly hours of dryer operation] Compliance with the mass emission limits will be assumed prior to conducting the initial stack test.
- b) For PM/PM₁₀ Emissions:
 - i) ACC operating temperature shall be monitored and maintained above 1,400°F (3- hour average).
 - ii) Actual emission rate = [Monthly briquet production] x [Emission factor observed during most recent stack test (pounds PM/PM₁₀ per ton of briquets)] / [Monthly hours of dryer operation] Compliance with the mass emission limits will be assumed prior to conducting the initial stack test.
- c) For Opacity:

The permittee shall perform weekly observations of the briquet dryer/cooler stack. Visible emissions shall be monitored as required by 5(c) below.

3) Testing Requirements:

- a) Except as noted below, pursuant to 401 KAR 59:005 and 401 KAR 50:045, performance using the reference methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.
- b) Initial performance testing shall be conducted at the dryer exhausts for NO_x, PM and PM₁₀ emissions.
- c) See Section D.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4) Specific Monitoring Requirements:

The permittee shall monitor the following parameters:

- a) Daily hours of operation of the charcoal drying operations.
- b) Monthly briquet throughput of the charcoal drying operations.

5) Specific Recordkeeping Requirements:

The permittee shall keep records of the following:

- a) Monthly records of total briquet production.
- b) Monthly total hours of operation of the briquet drying operations.
- c) Weekly logs of visible emissions observations. The following information shall be kept:
 - i) Whether any air emissions were visible from combine briquet dryer/cooler stack.
 - ii) Whether the visible emissions were normal for each stack. If no abnormal emissions are observed, no further observations or records are required. If abnormal visible emissions are observed, the permittee shall perform a Method 9 reading for determining the opacity of the stack emissions. The opacity shall be recorded in the log.

6) Specific Reporting Requirements:

See Section F.

7) Specific Control Equipment Operating Conditions:

The ACC shall operate at a minimum temperature of 1,400°F (3-hour average).

8) Alternate Operating Scenarios:

Auxiliary Burner Operation - Process heat for the briquet dryers is typically provided by the ACC exhaust gases. In the event that the ACC is not in operation, process heat will be provided to the briquet dryers by a natural gas-fired auxiliary burner with a maximum rated capacity of 20 MMBTU per hour.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 03

Briquet Cooling Operations

Description:

| | |
|------------------|-------------------|
| Machine Point 01 | Briquet Cooler #1 |
| Machine Point 02 | Briquet Cooler #2 |
| Machine Point 03 | Briquet Cooler #3 |

| | |
|------------------------------|-----------------------------------|
| Control Equipment: | None |
| Operating Rate: | 19.5 tons briquets (dry)/hr total |
| Construction Commenced Date: | Briquet Cooler #1 - 1995 |
| | Briquet Cooler #2 - 2002 |
| | Briquet Cooler #3 - proposed 2003 |

APPLICABLE REGULATIONS:

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality
Regulation 401 KAR 59:010, New process operations

1) Operating Limitations:

Total dry briquet throughput at the briquet cooler #1, #2 and #3 shall not exceed 19.5 dry tons per hour.

Compliance Demonstration Method:

The permittee shall monitor the following:

- a) Briquets processed in the briquet coolers per month.
- b) Total hours of briquet cooler operation per month.
- c) Hourly briquet production throughput = [Total monthly briquets processed] / [Total monthly hours of briquet cooler operation]

2) Emission Limitations:

- a) Pursuant to Regulations 401 KAR 51:017, PM/PM₁₀ emissions shall not exceed 17.87 pounds per hour total for briquet cooler #1 and #2 or 8.94 pounds per hour from each briquet cooler.

PM/PM₁₀ emissions for briquet cooler #3 shall not exceed 3.58 pounds per hour.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Pursuant to Regulation 401 KAR 59:010, Section 3(1), emissions from the unit shall not exceed twenty (20) percent opacity based on a six-minute average.

Compliance Demonstration Method:

- a) For PM/PM₁₀ Emissions:

Actual emission rate = [Monthly briquet production] x [Emission factor observed during most recent stack test (pounds PM/PM₁₀ per ton of briquets)] / [Monthly hours of cooler operation]
Compliance with the mass emission limits will be assumed prior to conducting the initial stack test.

- b) For Opacity:

The permittee shall perform weekly observations of the combined briquet dryer/cooler stack. Visible emissions shall be monitored as required by 5(c) below.

3) Testing Requirements:

- a) Except as noted below, pursuant to 401 KAR 59:005 and 401 KAR 50:045, performance using the reference methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.
- b) Initial performance testing shall be conducted at the cooler exhausts for PM₁₀ and PM emissions.
- c) See Section D.

4) Specific Monitoring Requirements:

The permittee shall monitor the following parameters:

- a) Monthly hours of operation of the briquet cooling operations.
- b) Monthly briquet throughput for the briquet cooling operations.

5) Specific Recordkeeping Requirements:

The permittee shall keep records of the following:

- a) Monthly briquet throughput production.
- b) Monthly hours of operation of the briquet cooling operations.
- c) Weekly logs of visible emissions observations. The following information shall be kept:
- i) Whether any air emissions were visible from each cooler stack.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii) Whether the visible emissions were normal for the combined briquettdryer/cooler stack.
If no abnormal emissions are observed, no further observations or records are required.
If abnormal visible emissions are observed, the permittee shall perform a Method 9 reading for determining the opacity of the stack emissions. The opacity shall be recorded in the log.

6) Specific Reporting Requirements:

See Section F.

7) Specific Control Equipment Operating Conditions:

N/A

8) Alternate Operating Scenarios:

N/A

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Unit 04 Charcoal Manufacturing Operations****Description:**

| | |
|------------------|--|
| Machine Point 01 | Briquet Handling & Packaging (3 dust collectors) |
| Machine Point 02 | Starch Silo |
| Machine Point 03 | Lime Silo |
| Machine Point 04 | Sawdust Silo |
| Machine Point 05 | Nitrate Silo |
| Machine Point 06 | Char Load Drop |
| Machine Point 07 | Mix Tank |

Control Equipment:

| | |
|------------------|---|
| Machine Point 01 | Briquet Handling Fabric Filter #1 |
| Machine Point 01 | Briquet Handling Fabric Filter #2 |
| Machine Point 02 | Starch Silo Fabric Filter |
| Machine Point 03 | Packaging Baghouse |
| Machine Point 04 | Lime Silo Fabric Filter |
| Machine Point 05 | Machine Point 01 Sawdust Silo Fabric Filter |
| Machine Point 06 | Nitrate Silo Fabric Filter |
| Machine Point 07 | Char Load Drop Fabric Filter |
| Machine Point 08 | Mix Tank Fabric Filter |

| | |
|-----------------|--|
| Operating Rate: | Machine Point 01 – 13 tons briquets/hr total |
| | Machine Point (02, 03, 04, 05, 07) – 35 tons/hr each |
| | Machine Point 06 – 75 tons/hr |

| | |
|------------------------------|---|
| Construction Commenced Date: | Machine Point 01 (Unit 1) – 1995 |
| | Machine Point 01 (Unit 2) – Proposed 2001 |
| | Machine Point (02, 03, 04, 07) – 1995 |
| | Machine Point (05, 06) – Proposed 2001 |

APPLICABLE REGULATIONS:

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality

Regulation 401 KAR 59:010, New process operations

1) Operating Limitations:

- a) The permittee is said to be in compliance for all emission points contained with Emission Unit 4 when briquet dryer production is limited to 13 tons briquets (dry)/hr total or 113,880 tons/year.
- b) Each of the above-listed sources shall be equipped with a fabric filter. The fabric filters shall control emissions of PM and PM₁₀ and shall be in operation and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE

REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

times the sources are in operation. The silo and mix tank dust collectors are considered in operation any time material is being conveyed into the silos.

Compliance Demonstration Method:

The permittee shall record the occurrence and duration of each incident when the sources are in operation, but the associated fabric filter is not.

2) Emission Limitations:

- a) Pursuant to Regulations 401 KAR 51:017, PM/PM₁₀ emissions from each of the fabric filter collectors serving the sources shall not exceed an outlet PM/PM₁₀ concentration of 0.01 gr/scf.
- b) Pursuant to Regulation 401 KAR 59:010, Section 3(1), emissions from the unit shall not exceed twenty (20) percent opacity based on a six-minute average.

Compliance Demonstration Method:

- a) Compliance with the emission limitations is presumed during normal operations of the fabric filters based on good operating and maintenance practices.
- b) In the event of any malfunction of a fabric filter that may increase emissions to the atmosphere, the permittee shall determine compliance through the maintenance of the records specified in 5(c) below.

3) Testing Requirements:

- a) Except as noted below, Pursuant to 401 KAR 59:005 and 401 KAR 50:045, performance using the reference methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.
- b) See Section D.

4) Specific Monitoring Requirements:

The permittee shall monitor monthly hours of operation of each of the charcoal manufacturing operations.

5) Specific Recordkeeping Requirements:

The permittee shall keep records of the following:

- a) All maintenance activities performed on the fabric filters.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b) During periods of malfunction During periods of malfunction of any fabric filter, if the associated source is in operation, a a daily log of the following information shall be kept:

- (1) Whether any air emissions were visible from the fabric filter stacks.
- (2) If visible emissions are observed, the permittee shall perform a Method 9 reading to determine the opacity of the emissions. The opacity shall be recorded in the log. If opacity is shown to exceed the limitation of twenty (20) percent based on a six-minute average, material loading to that affected silo should cease as soon as possible, but no later than the end of that working day, and the fabric filter should be repaired or replaced to assure compliance with the opacity regulations.

6) Specific Reporting Requirements:

See Section F.

7) Specific Control Equipment Operating Conditions:

N/A

8) Alternate Operating Scenarios:

N/A

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

05 Material Handling Operations and Plant Roadways

Description:

| | |
|------------------|--------------------------|
| Machine Point 01 | Coal Drop Points |
| Machine Point 02 | Char Loading |
| Machine Point 03 | Char Receipt |
| Machine Point 04 | Wood Receipt and Storage |
| Machine Point 05 | Plant Roadways |

APPLICABLE REGULATIONS:

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality

Regulation 401 KAR 63:010, Fugitive dust emissions

1) Operating Limitations:

- a) The permittee shall limit the throughput of the coal drop points such that the maximum annual total (12-month rolling average) does not exceed 50,000 tons per year.
- b) The permittee shall limit the char handling throughput such that the maximum annual total (12-month rolling average) does not exceed 50,000 tons per year for the loading operations and 13,440 tons per year for the receipt operations. The char receipt throughput limit shall become applicable to the facility 180 days after start-up of Emission Unit 1.
- c) Pursuant to 401 KAR 63:010, all reasonable measures shall be taken to prevent particulate matter from becoming airborne at all times. These measures shall include but not be limited to the following:
 - (1) Use of enclosures for char and wood receipt operations.
 - (2) Paving roadways and maintaining in-plant speed controls.

Compliance Demonstration Method:

The permittee shall monitor the char and coal throughput for the above-listed sources on a monthly basis.

2) Emission Limitations:

Pursuant to 401 KAR 51:017, the permittee shall operate the emissions sources listed in this section in such a manner as to minimize fugitive dust emissions and PM/PM₁₀ emissions.

Compliance Demonstration Method

Compliance with the PM/PM₁₀ BACT limit will be presumed by limiting material throughput

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

rates to the rates specified above in condition (1).

3) **Testing Requirements:**

N/A

4) **Specific Monitoring Requirements:**

N/A

5) **Specific Recordkeeping Requirements:**

The permittee shall keep records of monthly material throughput rates.

6) **Specific Reporting Requirements:**

N/A

7) **Specific Control Equipment Operating Conditions:**

N/A

8) **Alternate Operating Scenarios:**

N/A

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4). While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

| | <u>Description</u> | <u>Generally Applicable Regulation</u> |
|----|--|--|
| 1. | Charcoal packaging and palletizing operations | 401 KAR 63:010 |
| 2. | Charcoal warehousing operations. | 401 KAR 63:010 |
| 3. | Charcoal briquet mixing and pressing operations. | 401 KAR 63:010 |
| 4. | Plant maintenance activities. | 401 KAR 63:010 401 KAR 59:010 |
| 5. | Miscellaneous natural gas-fired space heaters. | N/A |
| 6. | Natural gas-fired boilers with rated heat capacity less than ten(10)million BTU/hr, subject to 59:015 or 61:015. | 401 KAR 59:015 401 KAR 71:017 |

Note: The permittee will submit an initial Title V permit application within 12 months of operation of the proposed new sources. The Title V application will include a detailed list of insignificant activities.

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

- 1) Within 6 months after startup of the proposed wood dryer and furnace operations operating, the permittee shall conduct performance testing on the ACC stack and the existing briquet dryer and cooler stack. Testing of the second briquet dryer and briquet cooler will be performed within 6 months after the startup of these sources.

The performance tests shall include:

ACC stack on Briquet dryer/cooler #1, #2, #3: NO_x, PM, PM₁₀, CO, VOC, and SO₂ emissions.

The permittee shall conduct a modified testing method using an out-of-stack Anderson impactor to determine the PM₁₀ emission rate from the ACC stack due to the impracticality of performing an EPA Method 201 test at the elevated temperatures in the ACC.

- a) Briquet dryer stack(s): NO_x, PM, PM₁₀ emissions
 - b) Briquet cooler stack(s): PM, PM₁₀ emissions
- 2) The performance tests shall be scheduled in such a manner that will allow sufficient time:
 - a) To conduct the performance tests;
 - b) To submit the test reports;
 - c) For verification of the test results by the division;
 - d) For use of the verified results as a basis for the submittal of the initial Title V application for the facility.
- 3) Wood Dryer and Furnace Operations (emission units 01)
To preclude Regulation 401 KAR 51:017, potential emissions of sulfur dioxide from emission unit 01 shall not exceed 40 tons, during any consecutive twelve (12) month period. The permittee may assure continuing compliance by use of quarterly stack tests. The permittee shall track and maintain quarterly totals and a twelve consecutive month summary of sulfur dioxide emissions to assure compliance with this limitation.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
2. Periodic maintenance of the control equipment, including cyclones and associated ductwork for the wood dryer, furnace and the ACC system, shall be performed as necessary to ensure proper operation of the equipment. Planned shutdowns of the char production process shall be scheduled as necessary for this maintenance activity.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements.
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement;
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [401 KAR 50:035, Permits, Section 7(1)(d)2 and 401 KAR 50:035, Permits, Section 7(2)(c)]
3. In accordance with the requirements of Regulation 401 KAR 50:035, Permits, Section 7(2)(c) the permittee shall allow the Cabinet or authorized representatives to perform the following:
 - a. Enter upon the premises where a source is located or emissions-related activity is conducted, or where records are kept;
 - b. Have access to and copy, at reasonable times, any records required by the permit:
 - i. During normal office hours, and
 - ii. During periods of emergency when prompt access to records is essential to proper assessment by the Cabinet;
 - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times shall include, but are not limited to the following:
 - i. During all hours of operation at the source,
 - ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii. During an emergency; and
 - d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements. Reasonable times shall include, but are not limited to the following:
 - i. During all hours of operation at the source,
 - ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii. During an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the division's Bowling Green Regional Office at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.

The reports are due within 30 days after the end of each six-month reporting period that commences on the initial issuance date of this permit. The permittee may shift to semi-annual reporting on a calendar year basis upon approval of the regional office. If calendar year reporting is approved, the semi-annual reports are due January 30th and July 30th of each year.

Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to Section 6(1) of 401 KAR 50:035, Permits. All deviations from permit requirements shall be clearly identified in the reports.

6.
 - a. In accordance with the provisions of Regulation 401 KAR 50:055, Section 1 the owner or operator shall notify the Division for Air Quality's Bowling Green Regional Office concerning startups, shutdowns, or malfunctions as follows:
 1. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 2. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.
 - b. In accordance with the provisions of Regulation 401 KAR 50:035, Section 7(1)(e)2, the owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by general condition 6 a. above) to the Division for Air Quality's Bowling Green Regional Office within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by general condition F.5.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

7. Pursuant to Regulation 401 KAR 50:035, Permits, Section 7(2)(b), the permittee shall certify compliance with the terms and conditions contained in this permit, annually on the permit issuance anniversary date or by January 30th of each year if calendar year reporting is approved by the regional office, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Division for Air Quality's Bowling Green Regional Office and the U.S. EPA in accordance with the following requirements:
- Identification of each term or condition of the permit that is the basis of the certification;
 - The compliance status regarding each term or condition of the permit;
 - Whether compliance was continuous or intermittent; and
 - The method used for determining the compliance status for the source, currently and over the reporting period, pursuant to 401 KAR 50:035, Section 7(1)(c),(d), and (e).
 - For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
 - The certification shall be postmarked by the thirtieth (30) day following the applicable permit issuance anniversary date, or by January 30th of each year if calendar year reporting is approved by the regional office. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Bowling Green Regional Office
1508 Westen Avenue
Bowling Green, KY 42104

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

8. In accordance with 401 KAR 50:035, Section 23, the permittee shall provide the division with all information necessary to determine its subject emissions within thirty (30) days of the date the KEIS emission report is mailed to the permittee.
9. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the division by the source or its representative within forty-five days after the completion of the fieldwork.

SECTION G - GENERAL CONDITIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. A noncompliance shall be (a) violation(s) of state regulation 401 KAR 50:035, Permits, Section 7(3)(d) and for federally enforceable permits is also a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition.
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to Regulation 401 KAR 50:035, Section 12(2)(c);
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish to the division, in writing, information that the division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. [401 KAR 50:035, Permits, Section 7(2)(b)3e and 401 KAR 50:035, Permits, Section 7(3)(j)]
5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority.

SECTION G - GENERAL CONDITIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [401 KAR 50:035, Permits, Section 7(3)(k)]
 7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance. [401 KAR 50:035, Permits, Section 7(3)(e)]
 8. Except as identified as state-origin requirements in this permit, all terms and conditions contained herein shall be enforceable by the United States Environmental Protection Agency and citizens of the United States.
 9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6). [401 KAR 50:035, Permits, Section 7(3)(h)]
 10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 50:035, Permits, Section 8(3)(b)]
 11. This permit shall not convey property rights or exclusive privileges. [401 KAR 50:035, Permits, Section 7 (3)(g)]
 12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
 13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR 50:035, Permits, Section 7(2)(b)5]
 14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR 50:035, Permits, Section 8(3)(a)]
 15. Permit Shield: Except as provided in 401 KAR 50:035, Permits, compliance by the affected facilities listed herein with the conditions of this permit shall be deemed to be compliance with all applicable requirements identified in this permit as of the date of issuance of this permit.
- (b) Permit Expiration and Reapplication Requirements

This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete initial Title V application has been submitted to the division at least 12

SECTION G - GENERAL CONDITIONS (CONTINUED)

after initial operation of the proposed wood dryer and furnace operation. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the initial Title V permit is issued or denied by the division. [401 KAR 50:035, Permits, Section 12]

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 50:035, Section 15.
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority thirty (30) days in advance of the transfer.

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements

1. Construction of process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
2. Within thirty (30) days following commencement of construction, and within fifteen (15) days following start-up, and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Division for Air Quality's Bowling Green Regional Office in writing, with a copy to the division's Frankfort Central Office, notification of the following:
 - a. The date when construction commenced.
 - b. The date of start-up of the affected facilities listed in this permit.
 - c. The date when the maximum production rate specified in the permit application was achieved.
3. Pursuant to 401 KAR 50:035, Permits, Section 13(1), unless construction is commenced on or before 18 months after the date of issue of this permit, or if construction is commenced and then stopped for any consecutive period of 18 months or more, or if construction is not completed within eighteen (18) months of the scheduled completion date, then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Extensions of the time periods specified herein may be granted by the division upon a satisfactory request

SECTION G - GENERAL CONDITIONS (CONTINUED)

showing that an extension is justified.

4. Operation of the affected facilities for which construction is authorized by this permit shall not commence until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055, except as provided in Section I of this permit.
 5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration (*test*) on the affected facilities in accordance with Regulation 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Conditions G(d)6 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test.
 6. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the division shall be notified of the actual test date at least ten (10) days prior to the test.
- (e) Acid Rain Program Requirements
1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
- (f) Emergency Provisions
1. An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
 - d. The permittee notified the division as promptly as possible and submitted written notice of the emergency to the division within two working days after the time when emission limitations were exceeded due to the emergency. The notice shall meet the requirements of 401 KAR 50:035, Permits, Section 7(1)(e)2, and include a description of the emergency, steps taken to mitigate emissions, and the corrective

SECTION G - GENERAL CONDITIONS (CONTINUED)

actions taken. This requirement does not relieve the source of any other local, state or federal notification requirements.

2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement.
3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 50:035, Permits, Section 9(3)]

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

**RMP Reporting Center
P.O. Box 3346
Merrifield, VA, 22116-3346**

2. If requested, submit additional relevant information to the division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

SECTION H – ALTERNATIVE OPERATING SCENARIOS

N/A

SECTION I – COMPLIANCE SCHEDULE

N/A